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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,594	11/19/2003	Paul Meller	5552.1437-01	8652
22852	7590	12/14/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			ROSENBERGER, RICHARD A	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/717,594	<b>Applicant(s)</b> MELLER, PAUL	
	<b>Examiner</b> Richard A Rosenberger	<b>Art Unit</b> 2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 35-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/24/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 46 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is not adequate disclosure to support the claimed measuring the scattered and transmitted light "temporally both separately and simultaneously" as in claim 46. Measuring the two simultaneously appears disclosed, but "temporally both separately and simultaneously" is not adequately disclosed. Originally filed claim 7 mentions this feature, but that mere mention is not sufficient to teach those in the art how to make and use this "both temporally separately and simultaneously" detection..

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 35 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Tucker (US 3,786,261).

As in claim 35 herein, Tucker shows directing a light beam through an "accommodation vessel" (12). The fluid accommodated by the vessel (12) produces scattered light and transmitted light. The transmitted light is measured (by detector 38) and the scattered light is separately measured (by detector 32). The intensity of the light beam directed through the accommodation vessel is adjusted based upon the measured intensity of the transmitted component (through feedback loop 38, 44, 46, 52, 20). The system of Tucker is being used "for analysis processes", i.e., it is analyzing the fluid for "quantitative and qualitative evaluation" (Tucker, col. 1, ln.14; see also col. 5, lns. 36-42).

6. Claims 36-45, 51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (US 3,786,261) in view of Cheung et al (US 5,298,968), Blesener (US 5,262,841) and Goulas et al (US 4,348,111).

See above. Tucker shows separately measuring scattered and transmitted light and using the transmitted light to adjust the intensity of the light beam. The operation of the device is based upon the separate detection of the transmitted and scattered light, and those of ordinary skill in the art could use, and would have recognized that they could use, other arrangements to direct the light from the sample to the appropriate detectors. It is known in the art that appropriate diaphragms and beam directing mirrors and the like can be used to direct the light in such measurements. Cheung shows the known use of diaphragms to separate scattered and transmitted light. Blesener et al shows it is known to mounting an element to intercept transmitted light on another optical element; similarly mounting other optical elements, such as detectors, on other optical elements is a simple, straightforward and obvious extension of this technique. Goulas et al shows it is known to intercept the transmitted light by means of a mirror that reflects the light to a detector rather than place the detector itself in the direct optical path. Using filters in optical system is well-known in the art and would have been obvious; Goulas et al shows filters are known in the art and that those in the art can use such filters in such systems.

7. Claims 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (US 3,786,261) in view of Minekane et al (US 4,549,809).

See the rejection of claim 35 above. While Tucker shows measuring a fluid in a flow cell, it is known in the art that optical measurements can also be usefully made to fluids in cuvettes; see Minekane et al. It would have been obvious to use the system of Tucker to measure fluids in cuvettes because it is known that such measurements are

useful and replacing the sample holding arrangement of Tucker with a cuvette would not require any modification of the optical system of Tucker.

It is known in the art to use light transmitted through a moving cuvette to determine the position of the cuvette as it passes through the light beam to determine the proper position to make a measurement; this is shown by Minekane et al. Using this known technique with a measurement system that includes scattered light measurements, as in Tucker would have been obvious because it is a known manner of helping to ensure accurate measurements.

8. Claims 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (US 3,786,261) in view of Rodriguez (US 3,804,535) and Lowy et al (US 3,787,124).

It is known to separately measure the light transmitted by a sample, and scattered by that sample, using the transmitted light to adjust the intensity of the light beam; this is shown by the Tucker (see above). It is known to use an empty vessel as a calibration standard in calibrating an optical measuring apparatus, this is shown by Rodriguez (column 4, lines 1-6) and Lowy et al (column 8, lines 21-27). This known use of an empty cuvette to calibrate would have been obvious with any type of optical system, including those measuring scattered light; those in the art would have recognized that such instruments should be calibrated for accurate measurements to be obtained. The use of such a system in any environment in which it is known that such optical tests provide useful information would have been obvious.

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9. The remarks filed 24 September 2004 have been considered but have not been found persuasive. The changes in the claims, and the changes in content of the claims brought about by these changes, have rendered moot the arguments over the previous rejection, particularly with regard to the Cheung reference as a primary reference.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger  
10 December 2004



Richard A. Rosenberger  
Primary Examiner